



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:	Arie Sheffer	§	
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Serial No.:	10/043,336	§	
		§	
Filed:	Jan.. 14, 2002	§	Group Art Unit: 1771
		§	
For:	Sound Absorbing	§	Attorney
	Article	§	Docket: 01/22377
		§	
Examiner:	Pierce, Jeremy R.	§	

Commissioner for Patents  
P. O. Box 1450  
Alexandria VA 22313

Declaration under 37 CFR 1.132

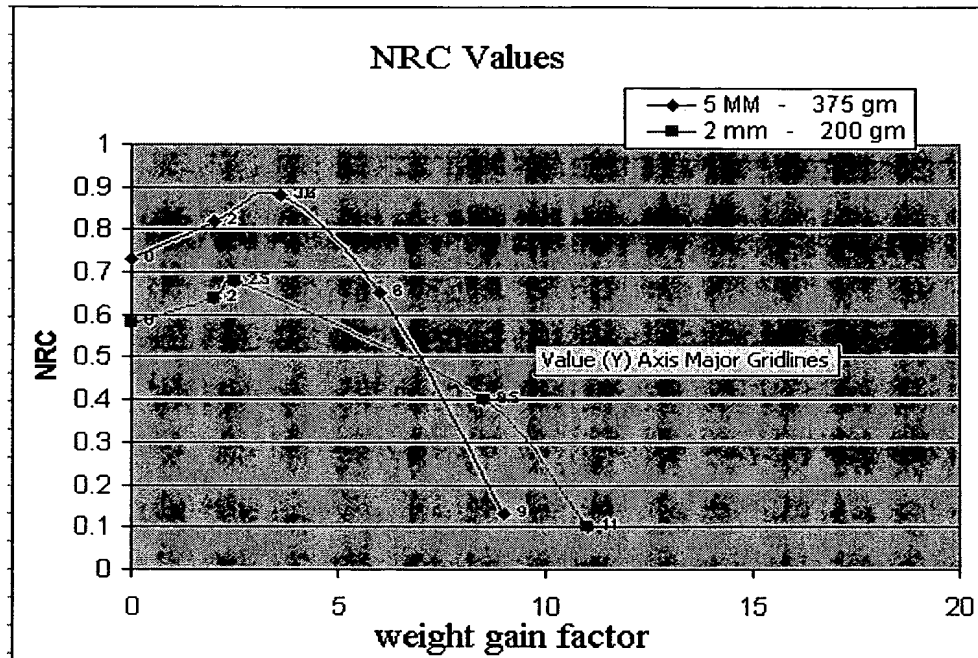
I am the inventor of the above-identified patent application. I have reviewed the US Patent Office Action, dated January 7, 2004, in which the Examiner rejected the claims of my patent application over US Patent 5,431,996, to Giesemann.

In order to clearly remove any doubts as to the similarity between the Giesemann's disclosure and the sound absorber of the present application, I hereby declare that I have performed experiments to form products according to the above-identified application of mine and according to the teachings of US Patent 5,431,996, to Giesemann. Experimental results and samples are submitted herewith.

The experiments related to two types of samples, both of nonwoven cotton. The first, denoted as "A," was of a 5-mm thick, 375 gm/m<sup>2</sup> fabric. The second, denoted as "B," was of a 2-mm thick, 200 gm/m<sup>2</sup> fabric. These were soaked in water glass to a varying degree, to produce samples A1 – A5 and B1 – B6, of different weight-gain factors. Noise Reduction Coefficient (NRC) values for the different samples were obtained according to ASTM 384-90, at a distance of 22.5 cm. Results are shown in the Figure and Tables, on the next page.

The weight-gain factor applicable for the sound absorber of present invention was found to be less than 7. At higher weight gain factors, the NRC value is too low, and sound absorption was ineffective. For example, for the 5-mm fabric, at a weight

gain factor of 9, the sound absorption parameter NRC was 0.13, as compared to a peak sound absorption NRC of 0.88, at a weight gain factor of 3.6. Similarly, for the 2-mm fabric, at a weight gain factor of 15, the sound absorption parameter NRC was too low for measurement, as compared to a peak sound absorption NRC of 0.68, at a weight gain factor of 2.5, as seen below.



2 mm -- 200 gm

Sample	NRC	Factor
B1	0.58	0
B2	0.64	2
B3	0.68	2.5
B4	0.4	8.5
B5	0.1	11
B6	~ 0	15

5 mm -- 375 gm

Sample	NRC	Factor
A1	0.73	0
A2	0.82	2
A3	0.88	3.6
A4	0.65	6
A5	0.13	9

The attached first sample, A3, produced in accordance with the present application, illustrates the starched-linen-like sound absorber of the present application, having a weight gain factor of 3.6 and a sound absorption NRC value of 0.88. Yet it is not hard, does not resist bending, and is not waterproof.

The attached second sample, A5, which attempted to imitate a panel-like structure, in accordance with the teachings of US Patent 5,431,996, to Giesemann, is relatively hard, having a weight gain factor of 9. Yet, its sound absorption NRC value is about 0.13, which is very low.

I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application of any patent issuing thereon.

Full Name of First Inventor: Arie Sheffer;

First inventor's Signature



Date: April 4, 2004